

a heart;

FIGs. 8B1-8B4 show states in which extracted contours of the left ventricle gradually become accurate through dynamic extraction that uses the extracted initial contour;

FIGs. 9A-~~9B~~<sup>9C</sup> show states in which the initial contour extracting unit estimates and generates a new initial contour by using previously extracted contours;

FIG. 10 is a flowchart mainly showing the processing of an image processing unit of the above ultrasonic diagnostic device;

10 FIG. 11 shows an example of a screen, displaying a capacity of the left ventricle, of a liquid crystal display (LCD) unit in a probe of the ultrasonic diagnostic device;

15 FIG. 12 shows an example of a screen, displaying the contour of the left ventricle and a graph showing change of its capacity over time, of a display apparatus of the ultrasonic diagnostic device;

FIG. 13 is a block diagram showing a function configuration of an ultrasonic diagnostic device of the second embodiment according to the present invention;

20 FIG. 14 is a diagram used to explain a method (single biplane area length method) used by an automatic capacity measuring unit of the ultrasonic diagnostic device for calculating a capacity;

FIGs. 15A-15D are diagrams used to explain the control processing of a pulsebeat synchronizing unit of the ultrasonic diagnostic device;

25 FIG. 16 shows an example of a screen, displaying contours of organs such as a left ventricle of a heart and a graph showing changes in its capacity over time, of a display apparatus of the ultrasonic diagnostic device;

30 FIG. 17A is a block diagram showing a function configuration of an image normalizing unit according to an example modification;

FIG. 17B is a density distribution transition diagram, which shows contents of normalization performed by the normalizing unit